Goddard Procedures and Guidelines

DIRECTIVE NO.	GPG 9980.1H	**APPROVED BY Signature:**	*Original Signed by*
EFFECTIVE DATE:	May 2, 2002	**NAME:**	A. V. Diaz
EXPIRATION DATE:	May 2, 2007	**TITLE:**	Director

Responsible Office: 306/Systems Management Support Office

Title: Internal Audit System

PREFACE

P.1   PURPOSE

This procedure establishes the internal audit process.

P.2   APPLICABILITY

This procedure applies to all GSFC organizations and functions within the scope of the QMS and the associated policies, procedures and guidelines, work instructions, and related records.

P.3   AUTHORITY

NPD 8730.3, NASA Quality Management System Policy (ISO 9000)

P.4   REFERENCES

a.   GPG 1060.1, Management Responsibility

b.   GPG 1710.1, Corrective and Preventive Action

c.   GPG 5340.2, Control of Nonconforming Product

P.5   CANCELLATION

GPG 9980.1G, Internal Audit System

P.6   SAFETY

None

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P.7 TRAINING

The Audit Coordinator maintains a listing of qualified auditors and lead auditors in the audit system from which internal audit teams are formed. Qualifications are based upon the following:

a. Lead Auditor - The individual has successfully completed Lead Auditor training as evidenced by training certification or class attendance sheet, or has led an audit team on at least one previous audit of a quality system in his/her GSFC or non-GSFC career, or has been an auditor on at least three quality system audits (experience evidenced by audit report);

b. Auditor - The individual has successfully completed auditor training as evidenced by training certification or class attendance sheet or has participated as an auditor in at least one audit of a quality system in his/her GSFC or non-GSFC career as evidenced by audit report. An individual may also be qualified by participating as an observer on a minimum of two internal audits, under the guidance of the Lead Auditor or Audit Team member.

A training module pertaining to this GPG is available at
http://ohr.gsfc.nasa.gov/DevGuide/ISO/home.htm

P.8 RECORDS

Record Title	Record Custodian	Retention
Qualified Auditors and Lead Auditors training/experience records	GSFC Audit Coordinator	NRRS 1/26.5A, Quality Management Files (Destroy when 7 years old.)
Audit Executive Summaries contained in the Audit System	GSFC Audit Coordinator	NRRS 1/26.5A, Quality Management Files
Internal audit Nonconformance Reports (NCRs) and associated Corrective Actions in the NCR/CA database	Code 302	NRRS 1/26.5A, Quality Management Files
Completed Configuration Change/Approval Requests (CCR Form GSFC 4-35)	Audit Coordinator	NRRS 8/9A&B, Configuration Control Board (CCB) Records (Records may be retired to an FRC when 2 years old. Destroy when 30 years old. Earlier destruction authorized upon receipt of specific approval from Program Manager)

P.9   METRICS

Internal audit results form a portion of the inputs for Management Reviews in accordance with GPG 1060.1. The actual metrics tracked from one review to the next may vary according to management desires and perceived trends or issues. In general, typical metrics may consist of:

a.   Number of internal audits performed during the reporting period.

b.   Number of internal audit nonconformances documented during the reporting period or average number per audit performed.

c.   A breakdown of the types of nonconformances found as a result of internal audits and possible trends.
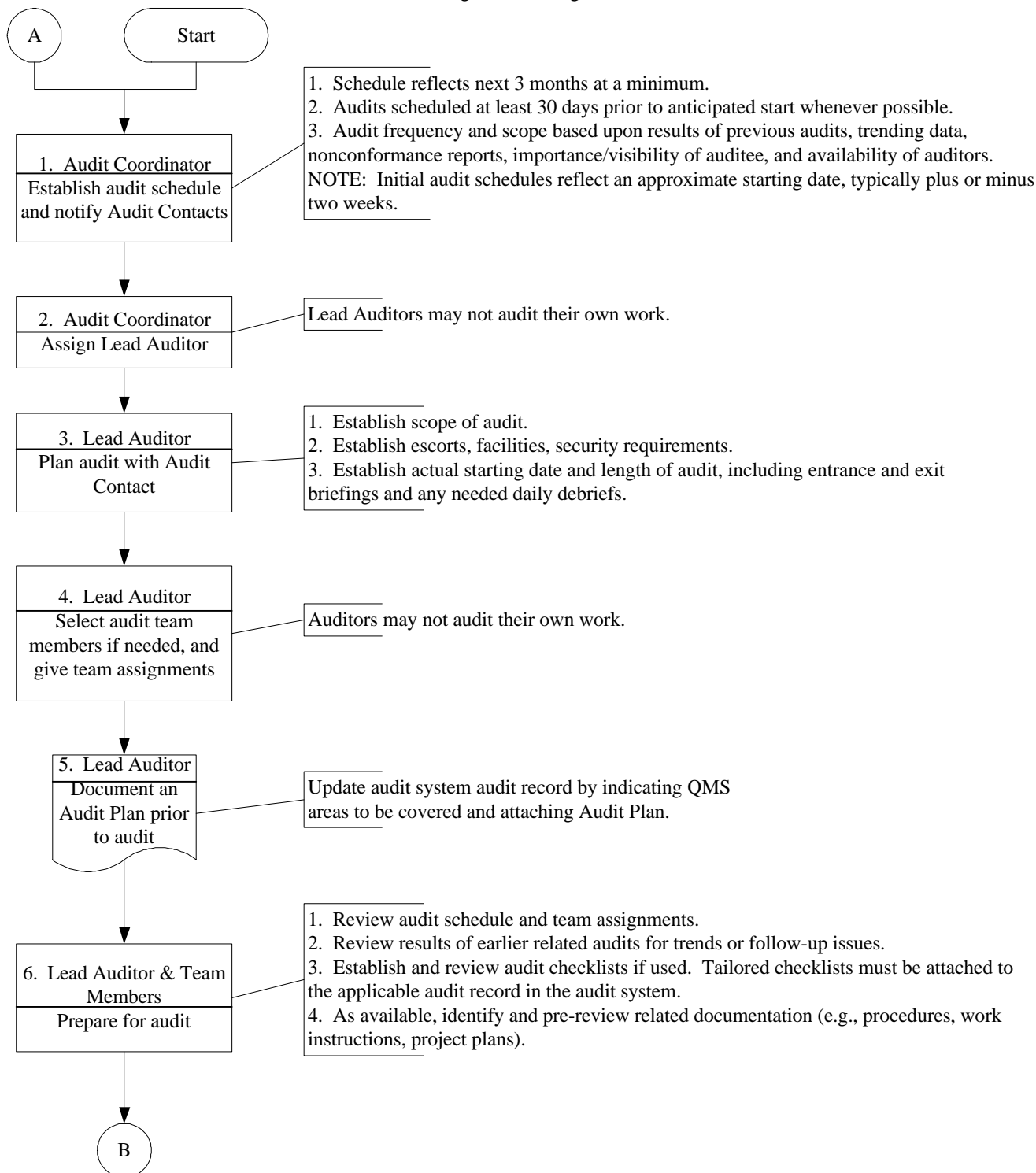
P.10   DEFINITIONS

a.   Audit Contact – The representative of the audited organization/function who is the primary point of contact with the Lead Auditor.

b.   Audit Coordinator – A GSFC civil servant, appointed by the Quality Management System Representative, responsible for the management of the internal audit system. The identification of the Audit Coordinator is found on the Help pages within the on-line Audit System. He/she has disposition authority for all audit system configuration change requests.

c.   Audit Record – An electronic data file, within the audit system, of individual internal audits. Each audit record, when completed, contains at a minimum the audit history, participants, scope, results, and associated planning and summary documents. The status of each audit is identified in the audit record. Status categories are defined in the audit system Help pages.

d.   Audit System - An inter-active on-line database used to document and track the schedule, participants, results, follow-up, and status of internal audits and supplier quality audits.

e.   Escort - The representative of the audited area who accompanies the auditor during the investigation and analysis of the objective evidence. This individual will (a) provide access to data records and physical areas, (b) offer interpretation of the audited organization's documents, (c) interface with other audited organization personnel, and (d) witness the discovery of nonconformances.

f.   NCR/CA Database – An inter-active on-line database, accessed via the GSFC QMS web site, used to document and track the status of identified nonconformance reports (NCRs) and associated corrective action (CA).

g.   Nonconformance – As applied to this GPG a nonconformance is an audit finding reflecting a failure to implement a documented requirement. The documentation of such findings as NCRs, vs. observations, is commensurate with the effects or potential effects of the nonconformity cited.

h.   Nonconformance Lead (NCL) – An individual identified within the NCR/CA database who has the authority and responsibility to process organization NCRs.

i.   Objective Evidence - Quantitative or qualitative information, records, or statements of fact pertaining to the quality of an item or service or to the existence and implementation of a quality system element. It is based on observation, measurement, or test that can be verified.

j.   Observation – A nonconformance found during an internal audit which, considering its effect or potential effect, does not warrant the documentation of an NCR but should nevertheless be corrected. Examples of an observation are findings that can be corrected on the spot or with relatively minor documentation modifications. An observation may also be an acknowledgement of a particularly effective implementation of a requirement.

k.   Quality Management System Representative (QMSR) - A GSFC manager designated by and reporting directly to the Center Director, who has responsibility and authority for the effective implementation of the QMS.

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PROCEDURES

Scheduling and Planning the Audit

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(A)    ( Start )
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1. Audit Coordinator
Establish audit schedule and notify Audit Contacts

1. Schedule reflects next 3 months at a minimum.
2. Audits scheduled at least 30 days prior to anticipated start whenever possible.
3. Audit frequency and scope based upon results of previous audits, trending data, nonconformance reports, importance/visibility of auditee, and availability of auditors.
NOTE: Initial audit schedules reflect an approximate starting date, typically plus or minus two weeks.

2. Audit Coordinator
Assign Lead Auditor

Lead Auditors may not audit their own work.

3. Lead Auditor
Plan audit with Audit Contact

1. Establish scope of audit.
2. Establish escorts, facilities, security requirements.
3. Establish actual starting date and length of audit, including entrance and exit briefings and any needed daily debriefs.

4. Lead Auditor
Select audit team members if needed, and give team assignments

Auditors may not audit their own work.

5. Lead Auditor
Document an Audit Plan prior to audit

Update audit system audit record by indicating QMS areas to be covered and attaching Audit Plan.

6. Lead Auditor & Team Members
Prepare for audit

1. Review audit schedule and team assignments.
2. Review results of earlier related audits for trends or follow-up issues.
3. Establish and review audit checklists if used. Tailored checklists must be attached to the applicable audit record in the audit system.
4. As available, identify and pre-review related documentation (e.g., procedures, work instructions, project plans).

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(B)
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Conducting the Audit

B

7. Lead Auditor
Conduct entrance briefing

1. Introductions, purpose and scope of audit.
2. Confirm schedule (i.e., daily briefings, exit briefing).
3. Overview of area operations/organization if necessary. Overview given by auditee.

8. Audit Team
Conduct audit

1. Conduct interviews & examine objective evidence.
2. Discuss observed nonconformities with escort.
3. Conduct daily team tag-ups as necessary.
4. Conduct daily briefings as necessary and planned with Audit Contact (led by Lead Auditor).

9. Lead Auditor
Conduct exit briefing

1. A summary of audit activities performed.
2. Identification of nonconformances and observations.
3. Review of corrective action process and responsibilities (ref. GPG 1710.1).

10. Audit Coordinator
Update status in Audit Record

Audit Reporting, Corrective Action and Close-Out

11. Lead Auditor
Document audit NCR's in NCR/CA database per GPG 5340.2 and database User Guide

Should document NCR's within 3 working days of exit briefing.

12. Lead Auditor
Document Executive Summary of audit in Audit System

Summary shall contain:
1. Entrance and exit briefing attendance lists.
2. Assessment of overall QMS compliance.
3. Identification of nonconformances and observations.

Should provide courtesy copy of report via e-mail to Audit Contact.

13. NCL
Process audit NCR's per GPG 1710.1

C

Audit Reporting, Corrective Action and Close-Out (cont.)

C

14. Lead Auditor

Monitor timeliness and adequacy of corrective action and NCR closure

1. Notify Audit Contact of untimely or inadequate corrective action. If resolution cannot be reached escalate to the Audit Coordinator (for potential resolution via the QMSR).
2. Notify Audit Coordinator when all audit NCR's have (a) been assigned an expected corrective action completion date, and (b) been closed by the NCL with satisfactory corrective action.

15. Audit Coordinator

Update status in Audit Record from (a) and (b) above

May be warranted because of:
1. Previous audit history of the subject organization;
2. Unlikelihood of another audit of organization in the next 12 months;
3. Extensive and/or complex corrective actions undertaken.

16. Audit Coordinator

Follow-up Audit needed?

Yes

No

A

17. Audit Coordinator

Archive Audit Record

CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	8/12/98	Initial Release
A	10/6/98	Header and footer format changes. 1(b) – Changed "process" to "requirement". 1(e) – reworded element (b). 2.2 – Removed limitation of one audit per year per organization. 2.3.1/2.3.2 – Removed third criterion of "The individual is available". 2.3.3.(f) – Added "approximately". 2.4.1 – Changed "shall" to "should" in third sentence. 2.4.2 – Removed requirement for audit activities to be performed in the presence of the escort. 2.5.1(b) – Inserted "proposed" and removed second sentence "Limit conversation to clarifications and avoid lengthy discussions about the merits of the nonconformances or possible corrective actions". 2.5.1(d) – Changed "the Exit Briefing date" to "NCR entry into the NCR/CA database". 2.7.1 – Inserted "proposed" in first sentence. 3. – Identified quality records maintenance responsibilities.
B	2/19/99	Changed definition of "audit nonconformance". In 2.2 added "importance of the element to a product". 2.3.3c - added "exact". Reworded 2.3.3e.6. 2.4.3 last word of second sentence changed from "discussion" to "approval". 2.5.1 - deleted requirement to present documented NCRs at exit briefing. 2.6 - added second paragraph.

CHANGE HISTORY LOG (continued)

Revision	Effective Date	Description of Changes
C	5/7/99	Expanded and moved records from section 3 to P6 to comply with GPG 1410.1 and added retention times. Revised 1(a), (d) and added (h). 2.3 - Changed Audit Schedule from annual to three months (2nd sentence revision), added 3rd and 4th sentences. Reworded sentence 5. Reworded and re-ordered contents of 2.4.2. Added 2.4.2(c) and (d) 2.7 - Added 2nd sentence 2.8.1 – Reworded 2.8.2 and 2.8.3 - Expanded to require Lead Auditor monitoring of corrective actions; notifying Audit Coordinator of entered expected corrective action completion dates. Added 2.8.3 Note. General revision of flowchart.
D	8/16/99	2.3, fourth sentence, revised to make 30 day advance warning a goal rather than an auditable requirement. Rewrite of first paragraph of 2.7 to allow entry of NCRs by Lead Auditor or Audit Coordinator. Three-day entry rule changed from "shall" to "should". Added parenthetical expression to first sentence of second paragraph of 2.7.
E	11/09/99	P6 - Refined necessary auditor qualification records and custodian 2.2(a) and (b) - Added detail to required qualification records. 2.3 modified to clarify audit scheduling and tailoring of same and added the Note. 2.10 added.
F	03/16/00	P4 - Deleted reference to GPG 5100.2 P6 - First record modified to reflect training/experience records rather than lists of auditors in auditor pool. Audit schedule deleted as a quality record. Third record retention period, deleted "whichever is sooner" at the end of the sentence.

CHANGE HISTORY LOG (continued)

Revision	Effective Date	Description of Changes
G	08/28/00	2.4.2e - Use of audit checklists is no longer mandatory. 2.5.2 - Removed reference to audit checklists as recording medium. 2.9 - Added audit record archiving process.
H	05/02/02	Complete reformat of Procedure section to both simplify and remove unwarranted self-imposed restrictions and requirements. New Preface sections added per latest GPG template. Added definitions for Audit Coordinator, Audit Record, Observation and NCL. Added new criteria for auditor qualification.